

Claims

1. Device for carrying out a surface treatment of a substrate under vacuum, which comprises a housing (1), which has at least two chambers (2-5) communicating with at least one vacuum source, at least one of which chambers is designed to serve as a vacuum lock chamber (2) which can be opened to the atmosphere and in which the substrate can be introduced and removed for access to the remaining chambers (3-5), **characterised in that** the housing (1) has an upper and a lower housing half (6, 7) peripherally joined by a flexible sealing member (15), at least one of the housing halves (6, 7) having at least two 5 symmetrically distributed recesses (8), which are intended to constitute at least some of the chambers (2-5), together with a revolver (9) pivotally mounted between the housing halves (6, 7) and having recesses (10) in which the substrate is intended to be placed, the housing halves (6, 7) under the action of a force-generating member being designed to be moved from a first position in which the housing halves (6, 7), through tight, sealing 10 contact with the revolver (9), prevent rotation thereof, to a second position in which the upper and lower housing halves (6, 7) are separated from the revolver (9) in order to permit rotation of the latter to predefined positions in which at least one of the recesses (10) in the revolver (9) at least partially coincides with one of the chambers (2-5), 15 allowing the substrate to be moved between the chambers (2-5).  
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2. Device according to Claim 1, **characterised in that** from the second position upper and lower housing halves (6, 7) are designed to assume the first position when the force-generating member no longer acts between the housing halves (6, 7).
- 25 3. Device according to either of Claims 1 or 2, **characterised in that** both upper and lower housing halves (6, 7) have opposing and co-incident recesses (8) and that the recesses (10) in the revolver (9) are through-recesses.
4. Device according to any one of Claims 1-3, **characterised in that** the vacuum lock 30 chamber (2) is provided peripherally with sealing members (16), designed to seal the vacuum lock chamber (2) off from the remainder of the housing (1) and from the revolver (9) when the housing halves (6, 7) are in their first position.

5. Device according to any one of Claims 1-4, **characterised in that** at least one of the remaining chambers (3-5) is provided peripherally with sealing members (16) designed to seal these off from the remainder of the housing (1) and from the revolver (9) when the housing halves (6, 7) are in their first position.

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6. Device according to any one of Claims 1-5, **characterised in that** the chambers (2-5) are designed to communicate with one and the same vacuum source.

7. Device according to any one of Claims 1-5, **characterised in that** at least one of the

10 chambers (2-5) is designed to communicate with a vacuum source, which is only designed to communicate with the aforesaid chamber.

8. Device according to any one of Claims 1-7, **characterised in that** the flexible sealing member (15) is a metal bellows.

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9. Device according to any one of Claims 1-8, **characterised in that** the sealing member (16) is an O-ring.

10. Device according to any one of Claims 1-9, **characterised in that** the force-generating

20 member is a hydraulic cylinder (12).